ABSTRACT

The horizontally operating stirred ball mill has a cylindrical grinding chamber (50) serving for receiving grinding media, a material inlet (37) arranged at the end of the grinding chamber (50) and opening into the interior (3) of the grinding chamber (50), a material outlet (38) arranged at the other end of the grinding chamber and leading out of the interior (3), a stirrer (1) having a plurality of stirrer members (2) and coaxial with the chamber axis (60), and a separation system present upstream of the material outlet (38) and consisting of a separation member (80) and a drive member which drives said separation member and which separates the grinding media from the ground material and transports them back into the interior (3) of the grinding chamber (50). The separation member (80) has two circular disks (5, 7) which are arranged coaxially with the chamber axis (61) and between which a plurality of conveying or blade elements (12) symmetrically distributed around the midpoint of the disk and leading inwards from the disk edge are arranged, which elements, during operation of the stirred ball mill, generate an opposing pressure on the mixture of material and grinding media, so that, owing to the centrifugal force and the different specific density, the grinding media are separated from the product and are transported back into the interior (3).

(Figure 1)